



**National Nutrient Database for Standard Reference**  
**Release 28 slightly revised May, 2016**

**Full Report (All Nutrients) 11457, Spinach, raw**

**Report Date: March 10, 2017 15:58 EST**

Nutrient values and weights are for edible portion.

Food Group : Vegetables and Vegetable Products

**Carbohydrate Factor: 3.57 Fat Factor: 8.37 Protein Factor:2.44 Nitrogen to Protein Conversion Factor:6.25**

**Refuse:28% Refuse Description: Large stems and roots**

Nutrient	Unit	1 Value Per100 g	Data points		Std. Error	1 cup 30g	1 bunch 340g	1 leaf 10g	1 package (10 oz) 284g
			1	--					
<b>Proximates</b>									
Water	g	91.40	1	--		27.42	310.76	9.14	259.58
Energy	kcal	23	--	--		7	78	2	65
Energy	kJ	97	--	--		29	330	10	275
Protein	g	2.86	9	0.112		0.86	9.72	0.29	8.12
Total lipid (fat)	g	0.39	7	0.032		0.12	1.33	0.04	1.11
Ash	g	1.72	8	0.035		0.52	5.85	0.17	4.88
Carbohydrate, by difference	g	3.63	--	--		1.09	12.34	0.36	10.31
Fiber, total dietary	g	2.2	1	--		0.7	7.5	0.2	6.2
Sugars, total	g	0.42	--	--		0.13	1.43	0.04	1.19
Sucrose	g	0.07	8	0.036		0.02	0.24	0.01	0.20
Glucose (dextrose)	g	0.11	8	0.032		0.03	0.37	0.01	0.31
Fructose	g	0.15	8	0.070		0.04	0.51	0.01	0.43
Lactose	g	0.00	1	--		0.00	0.00	0.00	0.00
Maltose	g	0.00	1	--		0.00	0.00	0.00	0.00
Galactose	g	0.10	1	--		0.03	0.34	0.01	0.28
<b>Minerals</b>									
Calcium, Ca	mg	99	9	4.996		30	337	10	281
Iron, Fe	mg	2.71	10	0.522		0.81	9.21	0.27	7.70
Magnesium, Mg	mg	79	7	4.794		24	269	8	224
Phosphorus, P	mg	49	7	3.479		15	167	5	139
Potassium, K	mg	558	10	28.703		167	1897	56	1585

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 30g	1 bunch 340g	1 leaf 10g	1 package (10 oz) 284g
Sodium, Na	mg	79	10	10.835	24	269	8	224
Zinc, Zn	mg	0.53	7	0.039	0.16	1.80	0.05	1.51
Copper, Cu	mg	0.130	7	0.007	0.039	0.442	0.013	0.369
Manganese, Mn	mg	0.897	6	0.048	0.269	3.050	0.090	2.547
Selenium, Se	µg	1.0	5	0.335	0.3	3.4	0.1	2.8
<b>Vitamins</b>								
Vitamin C, total ascorbic acid	mg	28.1	7	4.129	8.4	95.5	2.8	79.8
Thiamin	mg	0.078	9	0.008	0.023	0.265	0.008	0.222
Riboflavin	mg	0.189	9	0.008	0.057	0.643	0.019	0.537
Niacin	mg	0.724	9	0.032	0.217	2.462	0.072	2.056
Pantothenic acid	mg	0.065	6	0.008	0.020	0.221	0.007	0.185
Vitamin B-6	mg	0.195	6	0.008	0.059	0.663	0.020	0.554
Folate, total	µg	194	6	35.597	58	660	19	551
Folic acid	µg	0	--	--	0	0	0	0
Folate, food	µg	194	6	35.597	58	660	19	551
Folate, DFE	µg	194	--	--	58	660	19	551
Choline, total	mg	19.3	--	--	5.8	65.6	1.9	54.8
Betaine	mg	102.6	--	--	30.8	348.8	10.3	291.4
Vitamin B-12	µg	0.00	--	--	0.00	0.00	0.00	0.00
Vitamin B-12, added	µg	0.00	--	--	0.00	0.00	0.00	0.00
Vitamin A, RAE	µg	469	--	--	141	1595	47	1332
Retinol	µg	0	--	--	0	0	0	0
Carotene, beta <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a> <a href="#">5</a>	µg	5626	5	766.716	1688	19128	563	15978
Carotene, alpha <a href="#">2</a> <a href="#">3</a> <a href="#">4</a> <a href="#">5</a>	µg	0	4	0.000	0	0	0	0
Cryptoxanthin, beta <a href="#">2</a> <a href="#">4</a> <a href="#">5</a>	µg	0	4	0.000	0	0	0	0
Vitamin A, IU	IU	9377	--	--	2813	31882	938	26631
Lycopene <a href="#">4</a> <a href="#">5</a>	µg	0	7	0.000	0	0	0	0
Lutein + zeaxanthin <a href="#">4</a> <a href="#">5</a>	µg	12198	7	1930.873	3659	41473	1220	34642
Vitamin E (alpha-tocopherol)	mg	2.03	7	0.152	0.61	6.90	0.20	5.77
Vitamin E, added	mg	0.00	--	--	0.00	0.00	0.00	0.00
Tocopherol, beta	mg	0.00	7	0.000	0.00	0.00	0.00	0.00
Tocopherol, gamma	mg	0.18	7	0.036	0.05	0.61	0.02	0.51
Tocopherol, delta	mg	0.00	7	0.000	0.00	0.00	0.00	0.00

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 30g	1 bunch 340g	1 leaf 10g	1 package (10 oz) 284g
Vitamin D (D2 + D3)	µg	0.0	--	--	0.0	0.0	0.0	0.0
Vitamin D	IU	0	--	--	0	0	0	0
Vitamin K (phylloquinone)	µg	482.9	1	--	144.9	1641.9	48.3	1371.4
<b>Lipids</b>								
Fatty acids, total saturated	g	0.063	--	--	0.019	0.214	0.006	0.179
4:0	g	0.000	--	--	0.000	0.000	0.000	0.000
6:0	g	0.000	--	--	0.000	0.000	0.000	0.000
8:0	g	0.000	--	--	0.000	0.000	0.000	0.000
10:0	g	0.000	--	--	0.000	0.000	0.000	0.000
12:0	g	0.000	--	--	0.000	0.000	0.000	0.000
14:0	g	0.010	1	--	0.003	0.034	0.001	0.028
16:0	g	0.049	1	--	0.015	0.167	0.005	0.139
18:0	g	0.004	1	--	0.001	0.014	0.000	0.011
Fatty acids, total monounsaturated	g	0.010	--	--	0.003	0.034	0.001	0.028
16:1 undifferentiated	g	0.005	1	--	0.002	0.017	0.000	0.014
18:1 undifferentiated	g	0.005	1	--	0.002	0.017	0.000	0.014
20:1	g	0.000	--	--	0.000	0.000	0.000	0.000
22:1 undifferentiated	g	0.000	--	--	0.000	0.000	0.000	0.000
Fatty acids, total polyunsaturated	g	0.165	--	--	0.050	0.561	0.017	0.469
18:2 undifferentiated	g	0.026	1	--	0.008	0.088	0.003	0.074
18:3 undifferentiated	g	0.138	1	--	0.041	0.469	0.014	0.392
18:4	g	0.000	--	--	0.000	0.000	0.000	0.000
20:4 undifferentiated	g	0.000	--	--	0.000	0.000	0.000	0.000
20:5 n-3 (EPA)	g	0.000	--	--	0.000	0.000	0.000	0.000
22:5 n-3 (DPA)	g	0.000	--	--	0.000	0.000	0.000	0.000
22:6 n-3 (DHA)	g	0.000	--	--	0.000	0.000	0.000	0.000
Fatty acids, total trans	g	0.000	--	--	0.000	0.000	0.000	0.000
Cholesterol	mg	0	--	--	0	0	0	0
Phytosterols	mg	9	--	--	3	31	1	26
<b>Amino Acids</b>								
Tryptophan	g	0.039	19	--	0.012	0.133	0.004	0.111
Threonine	g	0.122	19	--	0.037	0.415	0.012	0.346
Isoleucine	g	0.147	19	--	0.044	0.500	0.015	0.417

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 30g	1 bunch 340g	1 leaf 10g	1 package (10 oz) 284g
Leucine	g	0.223	19	--	0.067	0.758	0.022	0.633
Lysine	g	0.174	23	--	0.052	0.592	0.017	0.494
Methionine	g	0.053	23	--	0.016	0.180	0.005	0.151
Cystine	g	0.035	8	--	0.011	0.119	0.004	0.099
Phenylalanine	g	0.129	19	--	0.039	0.439	0.013	0.366
Tyrosine	g	0.108	8	--	0.032	0.367	0.011	0.307
Valine	g	0.161	19	--	0.048	0.547	0.016	0.457
Arginine	g	0.162	18	--	0.049	0.551	0.016	0.460
Histidine	g	0.064	18	--	0.019	0.218	0.006	0.182
Alanine	g	0.142	7	--	0.043	0.483	0.014	0.403
Aspartic acid	g	0.240	7	--	0.072	0.816	0.024	0.682
Glutamic acid	g	0.343	7	--	0.103	1.166	0.034	0.974
Glycine	g	0.134	7	--	0.040	0.456	0.013	0.381
Proline	g	0.112	6	--	0.034	0.381	0.011	0.318
Serine	g	0.104	7	--	0.031	0.354	0.010	0.295
<b>Other</b>								
Alcohol, ethyl	g	0.0	--	--	0.0	0.0	0.0	0.0
Caffeine	mg	0	--	--	0	0	0	0
Theobromine	mg	0	--	--	0	0	0	0
<b>Flavonoids</b>								
Flavones								
Apigenin <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> <a href="#">11</a> <a href="#">12</a> <a href="#">13</a>	mg	0.0	9	0	0.0	0.0	0.0	0.0
Luteolin <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> <a href="#">11</a> <a href="#">12</a>	mg	0.7	10	0	0.2	2.5	0.1	2.1
Flavonols								
Kaempferol <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> <a href="#">11</a> <a href="#">12</a> <a href="#">13</a>	mg	6.4	12	4	1.9	21.7	0.6	18.1
Myricetin <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> <a href="#">11</a> <a href="#">12</a>	mg	0.3	11	0	0.1	1.2	0.0	1.0
Quercetin <a href="#">7</a> <a href="#">8</a> <a href="#">9</a> <a href="#">10</a> <a href="#">11</a> <a href="#">12</a> <a href="#">13</a>	mg	4.0	12	2	1.2	13.5	0.4	11.3
Isoflavones								
Daidzein <a href="#">14</a> <a href="#">15</a> <a href="#">16</a>	mg	0.00	3	0	0.00	0.00	0.00	0.00
Genistein <a href="#">14</a> <a href="#">15</a> <a href="#">16</a>	mg	0.00	3	0	0.00	0.00	0.00	0.00
Glycitein <a href="#">16</a>	mg	0.00	1	--	0.00	0.00	0.00	0.00
Total isoflavones <a href="#">14</a> <a href="#">15</a> <a href="#">16</a>	mg	0.00	3	0	0.00	0.00	0.00	0.00
Formononetin	mg	0.00	1	--	0.00	0.00	0.00	0.00

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 30g	1 bunch 340g	1 leaf 10g	1 package (10 oz) 284g
Coumestrol	mg	0.00	1	--	0.00	0.00	0.00	0.00
Proanthocyanidin								
Proanthocyanidin dimers <sup>6</sup>	mg	0.0	1	--	0.0	0.0	0.0	0.0
Proanthocyanidin trimers <sup>6</sup>	mg	0.0	1	--	0.0	0.0	0.0	0.0
Proanthocyanidin 4-6mers <sup>6</sup>	mg	0.0	1	--	0.0	0.0	0.0	0.0
Proanthocyanidin 7-10mers <sup>6</sup>	mg	0.0	1	--	0.0	0.0	0.0	0.0
Proanthocyanidin polymers (>10mers) <sup>6</sup>	mg	0.0	1	--	0.0	0.0	0.0	0.0

Sources of Data

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